

OXC-2037
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July 31, 1961

Dear Milt:

I have read with interest your "Notes on the Use and Handling of Mercury" dated 14 July 1961, in which you emphasize the toxicity to humans of both the metal and its vapor as well as the difficulty of maintaining it in a pure state needed for your operations.

Mercury is, however, even more potent in its effect on film than on people. There are literally hundreds of ointments, hair dressings, etc., including such common items as Mercuriochrome, which are prohibited in film handling areas because of their effect. As you probably appreciate from your researches, a mercury contamination of the skin can not be washed out but must "grow" out by skin replacement - usually a two week operation.

Mercury vapor hypersensitizes film whereas metallic particles desensitize film. As an example of its potency, if the support or film base contained three parts of mercury per billion, the emulsion would react.

If mercury is ever spilled in an area, it is almost impossible to get the concentration of mercury down to an acceptable level for film use. As a matter of fact, we don't even think that people who work in an area containing mercury should go into an area containing film. The same applies to trucks or other equipment.

I had hoped that your handling of mercury was strictly a factory job but I am beginning to get the impression that you intend to empty and refill your tubes and reservoirs at [redacted] In my opinion this should be avoided if at all possible. The next best solution, if it must be done at [redacted], is to do it in another building. I am sure that we would never willingly agree to the handling of mercury in [redacted] Even with the greatest of precautions there is the possibility of breakage or spillage with its long term contamination problems. As the least objectionable of the unacceptable solutions of operating within [redacted] I might suggest that you utilize for all mercury handling and only for this purpose, the small room originally intended as a film storage vault. This should

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have a separate ventilation system and you should exercise rigorous discipline to avoid tracking mercury into any other area. As a further precaution you might limit your operations to the article and configuration loading rooms nearest this room so as to provide as little opportunity as possible of contaminating the other set of rooms.

I also believe you should provide a G. E. Mercury Vapor Detector and patrol with it on a daily basis.

ELG/MDG

cc: J.P.
C.F.H. ✓

E. L. G.